

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended): A method of regenerating a lowered oxygen binding ability of a hemoglobin-vesicle suspension ~~to be used for injection as an oxygen infusion into a blood supply~~, comprising:

using, as a ~~the~~ hemoglobin-vesicle suspension, a phospholipid vesicle which ~~contains~~ includes the aqueous hemoglobin solution therein and an electron donor in an inner aqueous phase thereof; and

irradiating the ~~hemoglobin-vesicle~~ suspension, upon withdrawal and separation of the ~~hemoglobin-vesicle suspension from the blood supply~~, with light when hemoglobin ~~contained~~ in the ~~hemoglobin-vesicle suspension~~ is oxidized into methemoglobin and lose its oxygen biding ability, thereby reducing methemoglobin into hemoglobin to regenerate the oxygen binding ability.

Claim 2 (Original): The method according to claim 1, wherein said electron donor is selected from the group consisting of amino acids, saccharides, alcohols and flavin derivatives.

Claim 3 (Currently Amended): The apparatus for carrying out the method according to claim 1, comprising:

~~blood collecting means for taking the blood and the hemoglobin-vesicle suspension out of a living body, said taking occurring~~ after the hemoglobin-vesicle defined in claim 1 is

intravenously administered to the living body and the oxygen-binding ability of the hemoglobin-vesicle is lowered by generation of methemoglobin;

~~isolation~~ means for isolating the hemoglobin-vesicle from the blood obtained by the ~~blood collecting means for taking blood~~;

means for irradiating the hemoglobin-vesicle with light in order to regenerate the oxygen-binding ability of the hemoglobin-vesicle separated; and

means for returning the hemoglobin-vesicle which has regenerated its oxygen-binding ability into the living body.

Claim 4 (Previously Presented): The method according to claim 1, further comprising:

removing oxygen from the hemoglobin-vesicle suspension prior to the irradiating step.

Claim 5 (Currently Amended): The apparatus according to claim 3, further comprising:

~~oxygen removing~~ means for removing oxygen from the hemoglobin-vesicle isolated from the blood.